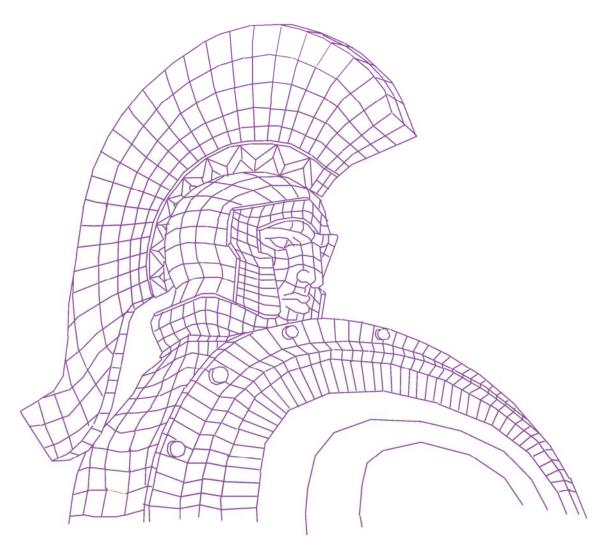
# orillertek<sup>™</sup>



# FaceAether™

Windows Login

User Manual (English Version)



# **Table of Contents**

Chapter 1	FaceAether™ Introduction3		
Chapter 2	Need to Know		
1.	System Requirements		
2.	. Operating Environment		
3.	Installation	4	
	3.1 Before Installing	4	
	3.2 Installation	4	
4.	Uninstall	8	
	4.1 Windows XP	8	
	4.2 Windows Vista	8	
Chapter 3	Instructions9		
1.	Online Registration	9	
	1.1 Register Now	9	
	1.2 Register Later	9	
2.	FaceAether™ Configuration and Its Functions	10	
	2.1 Graphic Unit Interface (GUI) Description	10	
	2.2 Help	10	
3.	FaceAether™ Configuration	11	
	3.1 Build Facial Template	11	
	3.2 Delete Facial Template	14	
	3.3 Tip Message	15	
	3.4 Activate FaceAether™ on Screen Saver	16	
4.	Windows Login	17	
	4.1 Windows XP	17	
	4.2 Windows Vista	17	
5.	Unusual Screen	18	
	5.1 Windows XP	18	
	5.1.1 Unable to detect webcam	18	
	5.1.2 FaceAether™ inactivated	18	
	5.1.3 Other Media Software	18	
	5.2 Windows Vista	19	
	5.2.1 Unable to detect webcam	19	
	5.2.2 FaceAether™ inactivated	19	
	5.2.3 Other Media Software	19	
Chapter 4	Frequently Asked Questions (FAQ)	20	
1.			
2.	Build Facial Template	20	
3.	Windows Login		
4.	User Access Control	21	



# **Chapter 1** FaceAether™ Introduction

FaceAether™ is a face recognition solution, developed by Brillertek Corporation, which utilizes facial features captured by webcam, and uses it as a safe mechanism for login to computer system. It is convenient, quick and safe to utilize facial features to login through FaceAether™. In addition, it resolves the problem of forgetting your login password or of unauthorized login by third parties.

# **Chapter 2 Need to Know**

#### 1. System Requirements

Operating System	Microsoft Windows XP / Windows Vista
	■ Notebook or Netbook
	For Windows XP
	1.6 GHz Intel Pentium Compatible or Higher
Hardwara Baguiramanta	1.6 GHz Intel Atom Processor N270 or Higher
Hardware Requirements	512 MB RAM minimum, 1 GB recommended
	For Windows Vista
	1.6 GHz Intel Pentium Compatible or Higher
	1 GB RAM minimum, 2 GB recommended
Screen Resolution	SVGA (800x600) or Higher
Hard Disk Space	100 MB and Above
Input Device	Built-in Camera

#### 2. Operating Environment

- (1) **Ambient Lighting**: Extreme lighting conditions (insufficient or exposure of lighting) will affect the recognition speed or accuracy, it is *highly recommended to build template in different scenes*, e.g. office, residence, coffee shop ...etc.
- (2) **Posture and Position**: When using FaceAether<sup>™</sup> to login or build facial template, please look directly at the screen with full frontal view completely visible. This is to ensure that webcam can fully capture your entire facial contour and features.



#### 3. Installation

#### 3.1 Before Installing

- You must have Windows account password to operate FaceAether™, go to Control Panel to set up Windows account password.
- FaceAether™ will replace user's original login system when installed on Windows XP (e.g. Fingerprint, Smart Card and other face recognition system... etc).

#### 3.2 Installation



Step 1: Double-click on setup.exe to begin installing FaceAether™.

Step 2: Select your preferred language.



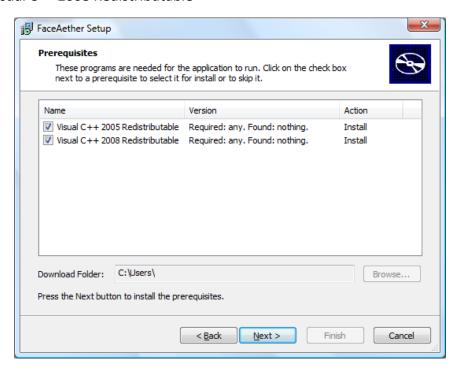
Step 3: Welcome to the Prerequisites Wizard, click





Step 4: Click on Next > to continue installing.

- Windows XP must install Visual C++ 2005 Redistributable
- Windows Vista must install Visual C++ 2005 Redistributable & Visual C++ 2008 Redistributable



Step 5: Welcome to FaceAether™ Setup Wizard, click Next>



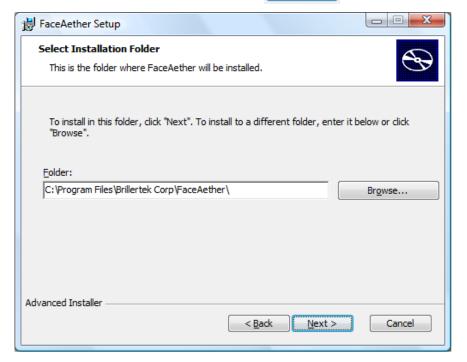


Step 6: Read the following End-User License Agreement carefully. Accept the terms then click

Next > to continue installing.

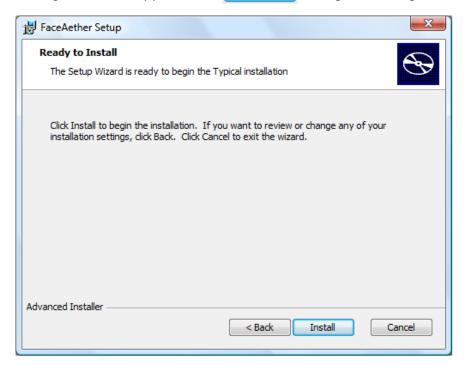


Step 7: Select folder to place the software then click Next >

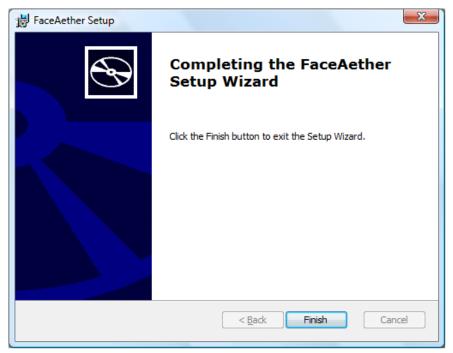




Step 8: The following screen will appear, click Install to begin installing FaceAether™.



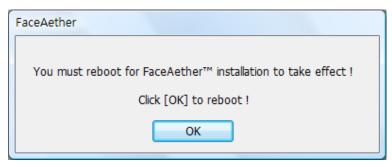
Step 9: At the end of the installation, you will see a screen as shown below, click Finish to complete installation.





Step 10: For Windows XP, click to reboot your computer. (Windows Vista no need to reboot after installation)

Note: For Windows XP, enter password to login when launching FaceAether™ for the first time.

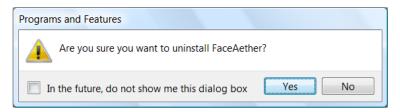


#### 4. Uninstall

#### 4.1 Windows XP

Step 1: MY COMPUTER → CONTROL PANEL → ADD OR REMOVE PROGRAMS → select FACEAETHER → UNINSTALL.

Step 2: A dialogue box will appear, click Yes to uninstall FaceAether™.



Step 3: When uninstall is completed, click OK to reboot.



#### 4.2 Windows Vista

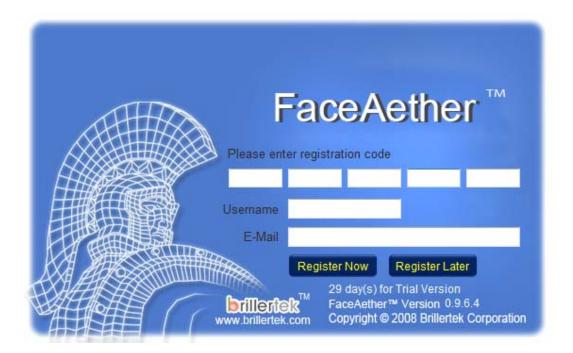
Steps: MY COMPUTER  $\rightarrow$  CONTROL PANEL  $\rightarrow$  PROGRAMS  $\rightarrow$  select FACEAETHER  $\rightarrow$  UNINSTALL. (Windows Vista no need to reboot after uninstall)



# **Chapter 3 Instructions**

#### 1. Online Registration

Double-click FaceAether™ icon to launch the software. When launching FaceAether™ Configuration, the following screen will appear every time if online registration is incomplete.



#### 1.1 Register Now

- Step 1: Enter registration code, username and email account.
- Step 2: When all fields are completed, click on Register Now.
- Step 3: A message will appear indicating registration is successful.

Users are encouraged to register the software to receive any future updates. If registration fails due to any reason, reenter the fields in accordance to the dialogue box.

#### 1.2 Register Later

If users do not register immediately, click on **Register Later** to skip registration screen and use FaceAether™ Configuration on trial.



# 2. FaceAether™ Configuration and Its Functions

## 2.1 Graphic Unit Interface (GUI) Description



No.	Name and Functions
1	Image Acquisition Area: Captures user's facial features
2	Status Bar: When capturing facial features, displays status as scrolling bar.
3	Recognition Level: Normal, Premium, Professional. Recognition level affects
4	Launch FaceAether™ when Windows login
5	Exit button
6	Username list: Select Windows account username
7	Password field: Enter Windows account password
8	Capture button: Build facial template, one scene per click, a total of 15 photos.
9	Delete button: Delete all photos (facial templates)
10	Counter: Displays number of photos, maximum of 300. If photos exceed 300,
11	Photo icon: Displays the most recently captured photo (template)

#### 2.2 Help

After FaceAether™ Configuration is activated, press "F1" for help.



## 3. FaceAether™ Configuration

#### 3.1 Build Facial Template

**To Start** → Double-click FaceAether<sup>™</sup> icon



to launch the software.



Step 1: Select Windows account username and enter corresponding password.

Step 2: Choose your desired recognition level, from low to high: *Normal, Premium,* or *Professional*.

**Explanation**: The higher the chosen recognition level the more complex to verify and login. Ambient lighting will greatly affect the recognition speed and accuracy.

- ▶ Standard Level: The speed of recognition is the fastest when the level of recognition is the lowest. It is the recommended setting for users that require normal level of security. Facial expression, posture and ambient lighting are not significant during process of verification. This is system default setting.
- Premium Level: The speed of recognition is medium when the level of recognition is medium. It is the recommended setting for users that require advanced level of security. Facial expression and posture must be similar to facial template during process of verification while ambient lighting does not affect greatly.
- ➤ **Professional Level:** The speed of recognition is the slowest when the level of recognition is the highest. It is the recommended setting for users that require maximum level of security. Facial expression, posture and lighting must be similar to facial template during process of verification.



Step 3: Before building facial template, shift your face within the red restriction area in **Image Acquisition Area**. When your face is completely within the red restriction area, the color red will turn green, and you can click **Capture** to start building facial template.

Note: If your face is not completely within the red restriction area, the software will not successfully capture your facial feature. Below is an example of false capture:



- Step 4: Click on **Capture** for FaceAether<sup>™</sup> to start building facial template. While waiting for **Status Bar** to process, make note of the following precautions to avoid possible errors:
  - a. Maintain suitable distance from webcam, the normal distance when looking at screen.
  - b. Do not use shelter (e.g. hair, sunglasses, other accessories... etc) to cover major parts of facial feature (e.g. eyebrow, eye, nose, lips, chin... etc).
  - c. Make sure major parts of facial features do not exceed the red restriction area in Image Acquisition Area, and your head is near upright, face facing toward webcam with neutral facial expression.
  - d. When unable to correctly frame your face in **Image Acquisition Area**, attempt to adjust facial expression, posture and ambient lighting until **Image Acquisition Area** can frame your face.





- Step 5: When **Status Bar** finished processing, **Counter** will automatically record the number of photos (templates), and **Photo Icon** will immediately display the most recent photo.
  - Technique tip 1: When you discover different facial expressions, posture or ambient lighting that is difficult to verify, you may use the scene as a new facial template.

    This will greatly increase the flexibility in the process of verification.
  - Technique tip 2: For users that wear eyeglasses, it is recommended to use both with and without eyeglasses as two separate scenes for new facial templates.
  - Technique tip 3: Portion of hotel rooms have dim ambient lighting while outdoors have bright ambient lighting, therefore it is recommended to build facial template in both scenes.
- Step 6: When your facial template is built successfully, system will automatically recognize you in **Image Acquisition Area** and display your username.
- Step 7: Check in the checkbox to "launch FaceAether™ when Windows login".
- Step 8: Click on **Exit** to leave FaceAether™ Configuration.



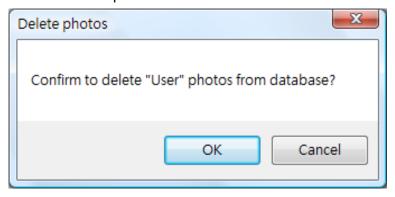
#### 3.2 Delete Facial Template

Step 1: Select Windows account username and enter corresponding password.

Step 2: Click on **Delete** button.



Step 3: Click ok in the dialogue box "Confirm to delete "User" photos from database," and system will delete **ALL** photos.



Step 4: Counter will automatically return to zero and the deletion is complete.

#### 30/300 Photos $\rightarrow 0/300$ Photos

Note: User must enter Windows account password every time when you build or delete facial template.



#### 3.3 Tip Message

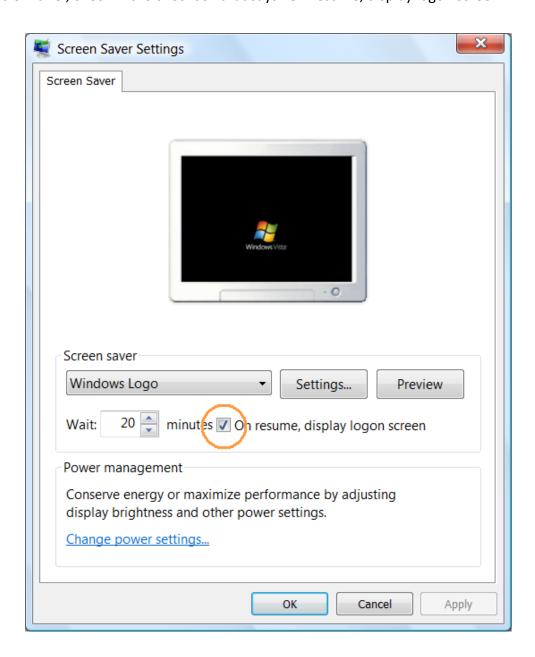
After you have deleted all facial templates, you must uncheck the checkbox that says "Launch FaceAether™ when Windows login". If the checkbox is still checked when you click on Exit, a tip message will appear like below:





#### 3.4 Activate FaceAether™ on Screen Saver

For FaceAether™ to take effect upon returning from screen saver, go to **Screen Saver Settings** in **Control Panel**, check in the checkbox that says "On resume, display logon screen."





#### 4. Windows Login

Once all setup process is complete, the software is ready to use. If users are unable to login through FaceAether™, please login manually. Simply follow the following steps.

When the login popup window appears

Step 1: Select username.

Step 2: Enter password then press **Enter** key.

Note: If unable to login successfully through FaceAether™, see the section on how to "build facial template".

#### 4.1 Windows XP



#### 4.2 Windows Vista





#### 5. Unusual Screen

#### 5.1 Windows XP

#### 5.1.1 Unable to detect webcam



#### 5.1.2 FaceAether™ inactivated



#### 5.1.3 Other Media Software

Installation of other media software will possibly cause the above screen to appear.



#### 5.2 Windows Vista

#### 5.2.1 Unable to detect webcam



#### 5.2.2 FaceAether™ inactivated

Login screen will return to normal Vista login screen.



#### 5.2.3 Other Media Software

Installation of other media software will possibly cause the above screen to appear.



# **Chapter 4 Frequently Asked Questions (FAQ)**

## 1. Install/Uninstall Software

- Q1: After I installed the software, why does the screen show a message box "Unable to obtain user's Windows account! Please go to Control Panel to check user account information."?
- **A1:** Usually this message will appear when there is a computer system error, please go to Control Panel user account, set up a correct user account and password, and then reinstall FaceAether $^{\text{TM}}$ .
- Q2: Why can't I use the original fingerprint login system as well after I installed FaceAether™?
- **A2:** When FaceAether™ is installed on Windows XP, it will replace user's original login system (e.g. Fingerprint, Smart Card and other face recognition system... etc).
- Q3: Why am I unable to launch FaceAether™ Configuration when I remove the prerequisites? (Prerequisites: Visual C++ 2005/2008 Redistributable)
- A3: FaceAether™ requires prerequisites to operate. If, for any reason, the prerequisites are removed, press F8 when you reboot to enter Safe Mode and uninstall FaceAether™. Then restart your computer and enter Windows to reinstall the software, then FaceAether™ Configuration can operate.

## 2. Build Facial Template

- Q1: Why am I unable to build facial template?
- **A1:** FaceAether™ face recognition solution uses facial features to recognize user identity, therefore, do not wear masks, sunglasses or objects that might cover the face when building facial template.
- **Q2:** What happens if my appearance has changed greatly in a short period of time?
- **A2:** It is recommended for you to rebuild your facial template.
- Q3: When building facial template, why is the Image Acquisition Area unable to display my face?
- **A3:** (1) Please make sure that your webcam is activated. (2) Make sure you have closed other programs that are occupying webcam, e.g. Video Conference.
- **Q4:** When building facial template, why does a message show "No user account password.

  Please go to Control Panel to set up password."?
- **A4:** FaceAether<sup>™</sup> is integrated with Windows account password. When there is no password, you are unable to build facial template.
- Q5: When using FaceAether™ to login to Windows system, why does a message show at lower left corner "Password has been modified. Please enter new password then go to FaceAether to set up user facial templates."?
- **A5:** When you have modified your Windows account password, you must rebuild your facial template; you do not need to rebuild your facial template when you modify your Windows account username.



### 3. Windows Login

- Q1: Why does the screen display unable to detect webcam at computer startup?
- **A1:** Make sure your webcam device is functioning.
- **Q2:** Why does the screen display FaceAether™ inactivated at computer startup?
- **A2:** Start FaceAether™ Configuration, and check in the checkbox "Launch FaceAether™ when Windows login."
- Q3: Why does FaceAether™ automatically cancel to launch the software?
- **A3:** When there are no facial templates in the database, system will automatically cancel to launch FaceAether™ at startup.
- **Q4:** <u>Does FaceAether™ protect my computer when I activate my screen saver?</u>
- **A4:** Yes, check in the checkbox "On resume, display logon screen" in Screen Saver Settings.

#### 4. User Access Control

- Q1: What is the access control of "Administrator" accounts when using FaceAether™?
- **A1:** Administrator will see all username in the username list at FaceAether™ Configuration.
- **Q2:** What is the access control of "Standard User" accounts when using FaceAether™?
- **A2:** Standard user will see only his or her username at FaceAether™ Configuration, and may only modify his or her own settings.
- Q3: What is the access control of "Guests" accounts when using FaceAether™?
- **A3:** To ensure Windows system's maximum security, FaceAether™ forbids guest users to operate the software. But guest users may still login through password mode.

Microsoft®, Windows®, Windows® XP and Windows Vista® are registered trademarks of Microsoft Corporation; Intel®, Pentium®, Intel Atom™ are registered trademarks of Intel Corporation.

Disclaimer: Like other biometric applications, FaceAether™ Windows Login (face recognition solution) does not offer 100% accuracy. Brillertek Corporation is not liable for any uncertain verification failures.



# **Brillertek Corporation**

Website: www.brillertek.com

Customer Service Email: <a href="mailto:service@brillertek.com">service@brillertek.com</a>

Customer Service Tel: (02)2834-3325

Customer Service Fax: (02)2834-2860

Customer Service Hours (Office Days): 09:30-12:00 / 13:30-17:30

Address: 2F, No. 766, Wen Lin Road, Taipei City, Taiwan.

Ver. 0.97 2009/02/06

Trademarks or registered trademarks are the property of their respective holders. Content are subject to change without further notice, check online for updates.